

## FIELDWORK AT DINTON PASTURES TO THE END OF 1993

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There were three field meetings and several workshop meetings involving some fieldwork at Dinton Pastures from the completion of the society's building in 1992 and additional fieldwork was done on the Diptera throughout 1993. Information on the insect fauna of the Park was thus accumulating although much remained to be done.

The meeting on 20.ix.1992 was the inaugural open day at the building and a minority of those attending attempted fieldwork although a good start was made in several orders. There had been light trapping near the building by John Muggleton on the previous night and the weather was good for daytime collecting. A surprising range of species was recorded although the park showed evidence of the recent years of drought, with Mungell's Pond significantly lower than it was throughout 1993.

The two field meetings in 1993 were affected by variable weather conditions and less well attended but the daytime meetings were enjoyed by those who came. On 15.v despite predictions of bad weather the morning was fine although windy but sufficient shelter was found behind the hedges on the west side of Black Swan Lake. After a short shower in early afternoon, the sun broke through to illuminate afternoon collecting by the river Loddon. It rained again later and the evening was cold and windy, so that any idea of light trapping had to be abandoned.

The meeting on 18.ix enjoyed reasonable weather during the day. Most of the morning was spent by Mungell's Pond but an afternoon circuit reached Middle Marsh and Sandford Lake. The sky was clear and the evening cold so conditions were far from ideal although better than on many nights in the preceding weeks; it was, nevertheless, decided to try light trapping and David Young ran two lights in the fields adjacent to the Country Park Office until 11.30 pm and a few moths were recorded at the security lights around the buildings; he also tried sugaring trees in the vicinity but this attracted only earwigs.

The findings on these meetings and other useful records obtained on other occasions are detailed under the relevant order so that some idea can be given on the progress made in each group.

**Lepidoptera.** A booklet produced by the Local Authority in 1985 (on sale at the Country Park Office) included a list of 30 species of butterfly which had by then been reported from the park, several of them single sightings. Only eight species of butterfly were observed in 1993, although it was a poor year for them generally.

Bill Parker has periodically run light traps near the buildings over several years, but his records were lodged with the park authorities and except for one September visit have unfortunately been mislaid. Thus there are three lists now available for that month. The 1992 field meeting recorded 28 species, but in 1993 only 17 species were noted, 12 of them in common.

Fortunately there had been a field meeting of the Reading and District Natural History Society at the Park on 13.vii.1990 when lights were run near Mungell's Pond and 48 species were recorded (communicated to me by Brian Baker). A few other species have been recorded on day visits and Colonel A. M. Emmet reported 18 species, mostly "micros", on the occasion of the opening ceremony on 27.vii.1993. The latter included *Caloptilia rufipennella* (Hübner) (vacated mines and tenanted cones on sycamore), believed to be new to Berkshire. Ron Parfitt has recorded *Nephoterix angustella* Hübner., which he reared on 29.vi from larvae mining berries of spindle tree. Caterpillars of *Tyria jacobaeae* L. were much in evidence on ragwort during the summer.

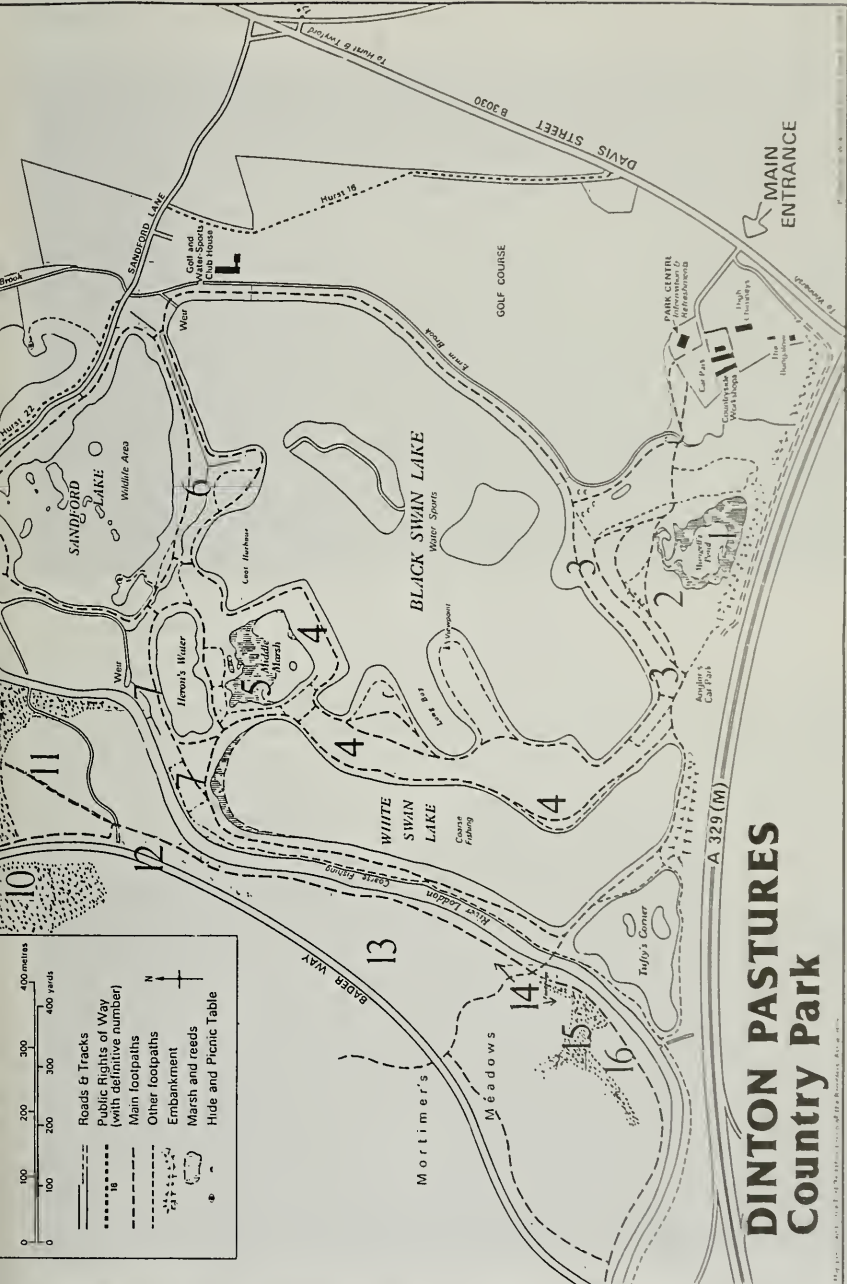


Fig. 1. Map of Dinton Pastures Country Park; numbers indicate areas described in text. Map prepared by the East Berkshire Group of the Ramblers' Association. Published by Wokingham District Council, July 1987.

Knowledge of the Lepidoptera is thus still at an early stage with little more than 100 species of moth so far recorded. Light trapping was thus arranged for several field meetings in 1994 to cover different parts of the Park and further investigation of the "micros" would also be welcomed.

**Diptera.** On the September 1992 field meeting Ian McLean concentrated attention in the vicinity of Mungell's Pond and found several species of interest, especially Dolichopodidae and Sciomyzidae, which he exhibited at the 1992 annual exhibition. On the same day I investigated the hedges and riverbanks for fungus feeders; I was surprised to find 36 species of fungus gnats including the very local *Megophthalmidia crassicornis* Curt. in two areas, and four species of Platypezidae. *Macquartia grisea* (Fall.) (Tachinidae), a parasite of chrysomelid beetles, was frequent, and two other species of the genus with similar habits have subsequently been found in the Park.

The Diptera Workshop on 8.v.93 preceded the first field meeting by a week, and morning fieldwork was productive, the most surprising find being *Meligramma euchroma* (Kowarz) (Syrphidae), which Alan Stubbs spotted on oak foliage; it is decidedly uncommon with larvae feeding on tree aphids. On the 15.v meeting about 150 species of Diptera were recorded, including 34 species of hoverfly and 14 species of cranefly. The cow parsley flowers near the river were attracting a good range of species including *Cheilosia vulpina* (Meig.) and *Parhelophilus frutetorum* (F.), while Ron Boyce was able to photograph *P. versicolor* (F.) sitting on foliage further along the river. Several other *Cheilosia* species were about including *C. honesta* Rond. and *Epistrophe nitidicollis* (Meig.) was found on oak foliage by the river. Gavin Boyd recorded *Xanthogramma pedissequum* (Harris) near Tufty's Corner. Several of the larger Tachinidae were seen including *Gymnocheta viridis* (Fall.) on tree trunks, *Tachina fera* (L.) and *Pelatachina tibialis* (Fall.) on foliage; the scarce species *Wagneria gagatea* R.-D. was found on both these May visits.

On 18.ix about 125 species of Diptera were recorded, with calypterates especially frequent and 11 species of Sciomyzidae were found; *Dichetophora obliterata* (F.) was in numbers in the lane between the south end of the lakes and Andrew Halstead found *Ilione lineata* (Fall.), which specializes in the freshwater bivalves, near Mungell's Pond. This, with his find of *Euthycera fumigata* (Scop.) by Sandford Lake on the same day, brought the list of "snail-killing flies" (Sciomyzidae) for the Park to 30 (45% of the British species; the other 28 were exhibited by me at the 1993 Annual Exhibition). A few late syrphids on this occasion included *Cheilosia pagana* (Meig.) and *C. vernalis* (Fall.).

Much fieldwork was carried out on the Diptera on 26 other dates during 1993 and with the assistance of specialists in several families, most of the material has now been identified, enabling 975 species to be recorded. Both higher plant and fungus feeders are well represented. Among these were 11 currently afforded Red Data Book status and a further 43 "notable" species; a range of these as well as some species new to Britain were exhibited at the 1993 Annual Exhibition and are listed in the Exhibition report. Only a few other species are therefore mentioned here.

A dolichopodid *Nematoproctus distendens* (Meig.), which is found by woodland streams in the New Forest and otherwise recorded in Britain only from one site in Glos., was found in June and July around a muddy creek (Fig. 5) in Sandford Copse. *Eustalomyia hilaris* (Fall.) (Anthomyiidae), associated with Sphecidae nesting in rotten wood, was found in the carr at the south end of Mortimer's Meadow; most British records are from the Thames valley. *Volucella inanis* (L.) (Syrphidae) was observed in several areas during August. The aquatic Stratiomyidae have not been found but we know that *Stratiomys potamida* (L.) has occurred, as it was photographed by Ron Boyce on umbels near White Swan Lake on 30.vii.1985; it may have disappeared during the drought years.



Fig. 2. Mungell's Pond.



Fig. 3. West shore of Black Swan Lake, with old oaks in hedge behind.

**Hymenoptera.** The sawflies were well worked, mainly by Andrew Halstead, with 52 species already recorded. On 18.ix larvae of *Caliroa cerasi* (L.) were found on *Pyracantha* planted by the Society's building; on 20.xi.92 larvae had been found on the more regular foodplant cherry. The alder wood wasp, *Xiphydria camelus* (L.) was found on 23.v, near alders by the lakes, and *Hartigia xanthostoma* (Evers.), which mines meadowsweet stems as a larva, on 5.vi.

Little attention was given to the Aculeata in 1993, with only 25 species so far recorded, but queens of *Dolichovespula media* (Retz.) were noted between Mungell's Pond and the hedge south of Black Swan Lake on 8.v (when one was caught by Roger Leeke) and again by me on 23.v. Most other species were determined by John Felton; these included three "notable" species: *Priocnemis hyalinata* (F.) (Pompilidae) and *Lestiphorus bicinctus* (Rossi) (Sphecidae) were found on Mortimer's Meadow on 31.vii, *Lasioglossum malachura* (Kirby) (Halictidae) near Mungell's Pond on 13.ix.

Seven species of gall wasp (two on rose, five on oak) were recorded on 20.ix by Ron Boyce and Andrew Halstead.

**Neuroptera.** Nine species were recorded, all determined by Colin Plant. *Micromus variegatus* (L.), a local grassland and scrub species has been recorded on both September field meetings and in July. *Sisyra fuscata* (F.) was found near Middle Marsh on 18.ix.

**Homoptera.** A nymph of *Ledra aurita* (L.) was found by the river on 20.ix by Roger Hawkins. *Cercopis vulnerata* Ill. was frequent in the park on 15.v.

**Heteroptera.** There are records of 31 species, mostly recorded by Roger Hawkins on 20.ix. Seven species of shield bug have been found including *Eysarcoris fabricii* (Kirkaldy) near White Swan Lake on 23.v and *Aelia acuminata* (L.) is frequent in the less disturbed areas of grassland. *Coreus marginatus* (L.) is often frequent on coarse herbage from July to September.

**Odonata.** There is a list of 22 species found in the park in the 1985 booklet. Eight species were recorded on the field meetings; the weather was wet on the day of the dragonfly workshop but observation of settled specimens nevertheless took place. *Calopteryx splendens* (Harris) was conspicuous by the river on 15.v. *Aeshna mixta* Lat. was frequent by the lakes during the September meetings.

**Orthoptera.** Five species have been recorded, including *Tetrix subulata* (L.) by Mungell's Pond on 20.ix and *Pholidoptera griseoptera* (De Geer) elsewhere on the same day.

**Coleoptera.** There are still relatively few beetle records, although some species of interest occurred. *Anthocomus rufus* (Herbst) (Melyridae) was found by Mungell's Pond on the September meetings. The cardinal beetle *Pyrochroa serraticornis* (Scop.) was frequent on the riverbank on the May meeting. A *Platycis* species (Lycidae) was noted on low foliage in the hedge south of Black Swan Lake on 17.vi, the date suggests the little known *P. cosnardi* but this will require confirmation. Several species of Cerambycidae were noted, including *Phytoecia cylindrica* (L.), which develops in umbel stems, found on cow parsley flowers near the river on 15.v and other parts of the park later in May, and *Leptura livida* F. was generally frequent at umbels in June. Andrew Halstead observed exit holes of *Agrilus pannonicus* P. & M. (Buprestidae) in a moribund oak on Mortimer's Meadow on 13.vi and he also recorded the weevil *Notaris scirpi* F. by White Swan Lake and Mungell's Pond in June and August.

**Araneae.** Martin Askins recorded adults of 20 species and less determinate immatures of several others on 20.ix.92. A further 10 species were added in 1993 but knowledge of the spiders is still at a very early stage.

**Habitats in the park.** The accompanying map (Fig. 1) indicates the distribution of the principal habitat types (the areas described below are indicated by numbers on the map). The park is dominated today by a series of lakes which are



Fig. 4. River Loddon, looking north from bridge in Park.



Fig. 5. Sandford Copse, *Nematoproctus* creek (parallel with river at north end).



Fig. 6. Sandford Copse, Loddon Lilies in may.

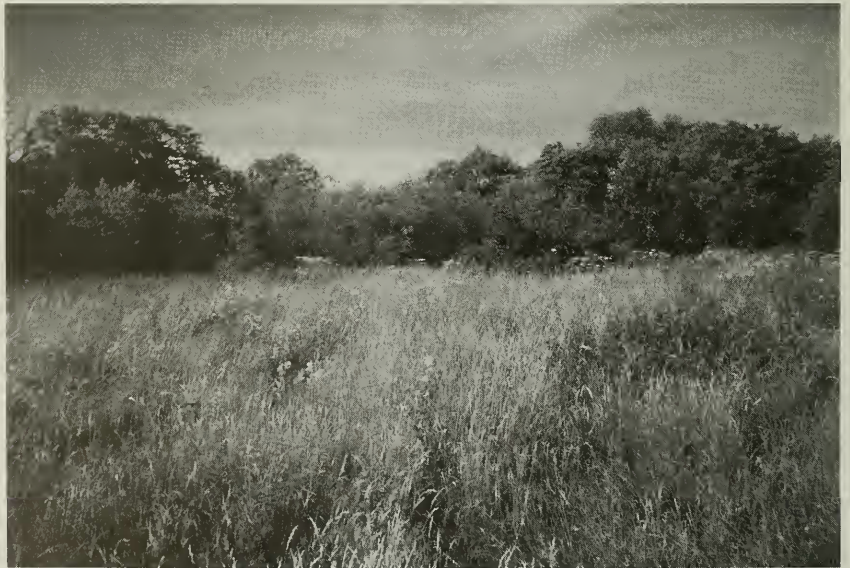


Fig. 7. Mortimer's Meadows, near river at south end, looking north west to wooded area.

flooded gravel pits, but there are a number of older features, principally the river Loddon with many old alders on its banks and the hedges between the lakes which include many mature oaks. Most parts of the park have produced some insects of interest but several areas have been identified as of particular significance.

Mungell's Pond, which is the nearest wetland area to the society's building, supports a larger variety of insects than any area of comparable extent in the park. The open pond margins are dominated by *Typha* beds but there is a good range of marsh plants and an adjacent area of willow carr grading into drier scrub and grassland. This area has been recently colonized but provides a valuable link to the hedges south of Black Swan Lake. Mungell's Meadow (2) is an adjoining enclosed area grazed by sheep, which was dominated by ox-eye daisy in the summer of 1993.

The mature hedges south of Black Swan Lake (3) and to a lesser extent those between the lakes (4) (Fig. 3) comprise two hedgebanks separated by a largely overgrown trackway (Mortimer's Way) and provide excellent shelter for shade-loving species and those associated with dead wood and fungi. Their continued existence has undoubtedly enabled many species to survive since before the days of gravel extraction, and a good number of woodland species have been found in these areas.

The several lakes have a great variety of marginal vegetation and have been colonized by many aquatic and plant-feeding species of insects, but relatively few "notable" species have been found by comparison with Mungell's Pond, suggesting that its wetland habitats are more ancient in origin. The reedbeds at the north end of White Swan Lake are, however, of some interest. Sandford Lake and Lavell's Lake at the north end of the Park are conservation areas for waterfowl.

Middle Marsh (5) is an area of tall mixed marsh vegetation with grass tussocks, surrounded by carr and hedges and bordering a small pond. Again few "notable" species have been found and much of the area was mown in September 1993 with the intention of encouraging the marsh orchids which otherwise occur in the park only around Mungell's Pond.

South of Sandford Lake (6) is an area of varied scrub and grassland habitats with a rich flora and a good range of insects requiring drier grassland have been found there.

The banks of the River Loddon (Fig. 4) are fringed by mature trees along the greater part of both banks and there are some broader areas of woodland, on the east side near Heron's Water (7) where a good concentration of dead wood and fungus feeding species has been found, and more especially on the west side where there is an area of carr at the south end and the more extensive Sandford Copse at the north end.

Sandford Copse (Fig. 5) comprises alderwood (8) near the river, including an area (outside the park boundary, near Sandford Mill) with SSSI status because of its large stand of loddon lily (*Leucojum aestivum* L.) (Fig. 6), and hazel coppice (9) dominated by bluebells in the spring on the higher ground near Bader Way. Bader Way Copse (10) on the other side of the road is a more extensive area of uncoppiced hazel; most of the hazel in Sandford Copse was coppiced during 1993. The alderwood areas have proved productive of uncommon Diptera especially near the river where a good amount of dead wood is present.

The entire area west of the river south of Sandford Copse is described as Mortimer's Meadows but is quite diverse. There is a field at the north end which develops tall marsh vegetation during the summer but has been extensively invaded by nettles, due to the lowering of the water table in the area following the construction of the housing estate on the other side of Bader Way. This field produced some good species early in the year but was mown in September 1993.

Where the river is closest to Bader Way there are some areas of herb rich grassland between a hedge and the road, where a high diversity of insects is present in a relatively



small area (12). The central areas include some planted copses of willows and other trees and provide shelter for many insects. The greater part of the open areas was mown for hay in July 1993 and has produced little of interest, but an unmown fringe (14) dominated by thistles near the river supports a good number of insects.

At the south end of Mortimer's Meadows, between the small area of carr and drier woodland (15) and the river, there is an area of varied tall marsh vegetation, which has a diverse flora (16) (Fig. 7). Although this area too becomes dry in the summer, it has retained a good range of insects from the time when all the fields adjoining the river were grazed watermeadows and the adjoining carr provides shelter for woodland species.

The higher plants of the park were surveyed in 1993, augmenting an earlier list drawn up 10 years ago and there are plant lists for all the different areas, about 300 species having been recorded altogether. This remarkable diversity of habitats has enabled the large number of Diptera species found to survive despite all the changes in land use and the public pressure that is currently inevitable. The Country Park authorities agreed to take invertebrate conservation into account in the management plan being drawn up during 1994 and it is hoped that the next few years will see knowledge of all groups of insects in the area significantly increasing.

## BENHS FIELD MEETING

Dinton Pastures, Berkshire, 21 May 1994

Leader: David Young. No doubt the meteorological records for 1994 will record yet another cold and wet spring, which was typified by the date chosen for this field meeting. Perversely the heavy rain and strong wind both stopped during the early evening and, with the temperature not unreasonable, five m.v. traps were run in the general area of the fishermen's car park on the western side of the country park. Unfortunately heavy and persistent rain returned soon after dark and the three members, and two guests, present had to work hard for the modest list of Lepidoptera species recorded.

Despite soaking wet foliage an attempt was made to beat for larvae. This effort quickly produced a fully grown larva of *Strymonidia w-album* (Knoch) beaten from hedgerow elm (*Ulmus* sp.), an interesting record both in terms of species recorded at Dinton Pastures and in view of the article by Peter Baker on the status of this species in north-west Surrey (*Br. J. Ent. Nat. Hist.* 1994; 7: 25). Other larvae recorded included *Operophtera brumata* (L.), *Apocheima pilosaria* (D. & S.), *Eramis defoliaria* (Cl.) and *Cosmia trapezina* (L.).

Moths recorded at m.v. light were: *Hepialus lupulinus* (L.), *Adela reaumurilla* (L.), *Elachista argentella* (Cl.), *Esperia sulphurella* (F.), *Syndemis musculana* (Hüb.), *Olethreutes lacunana* (D. & S.), *Epiblema cynosbatella* (L.), *Xanthorhoe spadicearia* (D. & S.), *Xanthorhoe ferrugata* (Cl.), *Xanthorhoe montanata* (D. & S.), *Chloroclysta truncata* (Hufn.), *Thera obeliscata* (Hüb.), *Plagodis dolabraria* (L.), *Opisthagraptis luteolata* (L.), *Biston betularia* (L.), *Cabera exanthemata* (Scop.), *Lomographa tenerata* (D. & S.), *Mimas tiliae* (L.), *Laotloe populi* (L.), *Furcula furcula* (Cl.), *Pterostoma palpina* (Cl.), *Agrotis puta* (Hüb.), *Ochropleura plecta* (L.), *Diarsia rubi* (View), *Charancyca trigrammica* (Hufn.).